2. TRANSIT GOALS AND NEEDS

A healthy public transit system is essential to quality of life and economic growth. Driving a car in Boston can be convenient, but roadway capacity is limited and parking is scarce, and excessive car use can have negative impacts on the community. Timely, clean, and safe public transit is crucial to maintain transit use and to support economic expansion.

The first section of this chapter summarizes the characteristics of the MBTA system. Goals are also identified to direct the analysis. The next section undertakes a needs assessment consisting of (1) an analysis of the spatial dimensions of transit use, (2) a discussion of trends that will affect future transit use, and (3) a description of the functions and limitations of the transit system. Finally, in response to the need assessment, specific objectives are established and related to the original goals. These provide a framework for the discussion of transit improvements outlined in the following chapters on system enhancement and expansion.

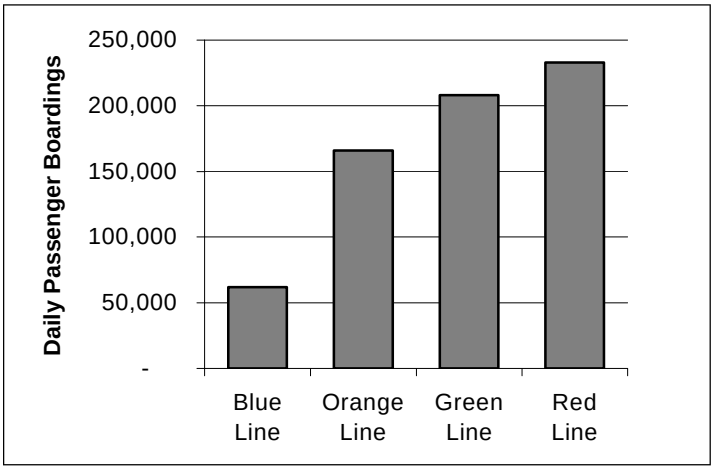
Overview of System

The MBTA serves 675,000 passengers every weekday, making it the fourth largest transit system in the country. The system consists of 155 local and express bus and trackless trolley routes; three heavy rail lines (Red, Orange and Blue); a light rail line (Green) with four branches, three operating as streetcar lines and one in its own right of way; the Mattapan High-Speed Line, a trolley operating in an exclusive right of way; 13 commuter rail lines, The Ride paratransit service, and commuter boat routes. Figure 5 illustrates MBTA routes within the City of Boston. Service is provided to 175 communities with a combined population of 2.6 million people. Figure 6 provides ridership figures for the four rapid transit routes.

Heavy Rail

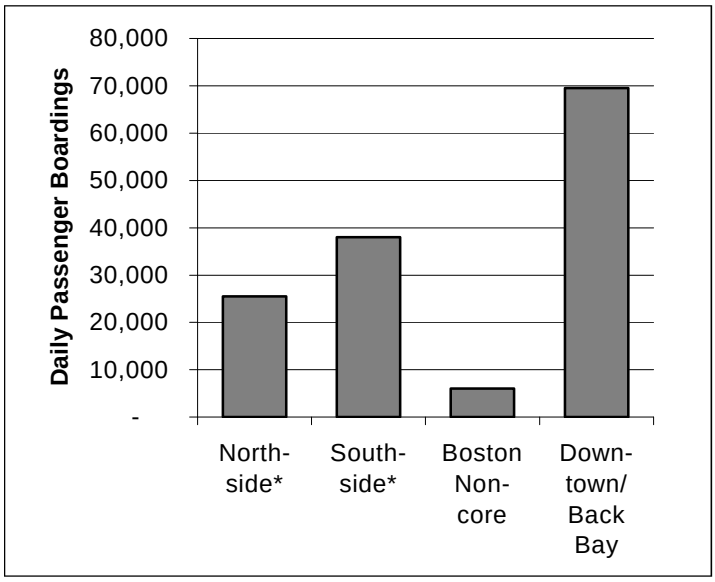
The three heavy rail lines – the Red Line, the Orange Line and the Blue Line – serve trips from Boston neighborhoods and suburban communities and provide transfer connections within the downtown. The majority of trips taken on these lines are peak trips to the downtown core in the morning and out in the evening. In addition to serving the core, the Blue Line provides access to Logan Airport. Walking and local bus are the primary modes of access to these three lines from Boston neighborhoods. Regional park and ride lots are located outside the city.

Figure 6
Daily Boardings at All MBTA Rapid Transit Stations



The Red Line is the most heavily used service of the MBTA rapid transit system. (Source: CPTS)

Figure 7
Daily Boardings at MBTA Commuter Rail Stations



Most commuter rail trips are to downtown and Back Bay, which are served by South Station, North Station and Back Bay Station (Source: CTPS, *Non-Boston Stations)

The MBTA provides commuter water shuttles from North and South Shore communities to downtown Boston.

Light Rail

The Green Line provides radial connections from downtown Boston to neighborhoods in Boston, Cambridge, Brookline and Newton. The Green Line operates in tunnels within the downtown and Back Bay. The Boston College ("B Line"), Cleveland Circle ("C Line) and Riverside ("D Line") operate at surface west of Kenmore Square. The Arborway ("E Line") operates at surface west of Massachusetts Avenue. The B, C, and E lines operate in transit reservations on city streets; a portion of the E Line operates in mixed traffic. The D Line operates in its own right of way and connects with Route 128. Walking is the primary modes of access to the Green Line from Boston neighborhoods. Regional parking facilities are located on the D Line outside the city.

Commuter Rail

Commuter rail is primarily designed to serve trips from suburban communities to downtown. There are also stations in the Boston neighborhoods of West Roxbury, Hyde Park, Roslindale and portions of Jamaica Plain and Roxbury. Driving is the primary modes of access to commuter rail service. In Boston neighborhoods, walking is also a common means of access. Figure 7 shows daily boardings at commuter rail stations within and outside Boston.

Water Transportation

A network of public and private boats is used to provide water transportation service. Express service is provided from the South Shore and North Shore to Long Wharf, Rowes Wharf and Logan Airport. Driving is the primary access for these regional services. Inner Harbor water shuttles provide connections to North Station, the Charlestown Navy Yard, Fan Pier and World Trade Center.

Surface Buses

The MBTA operates an extensive network of surface buses. These services support access to the rapid transit system from areas that are not within convenient walking distance of a station. Local buses are also used for trips to and from the downtown and other destinations along the routes. Express bus routes serving downtown primarily terminate at Haymarket or Federal Street in the Financial District. Walk is the primary mode of access for bus service, although some express bus customers also drive to park-and-ride lots.

Goals for a "Transit First" Approach

The City recognizes the importance of a high-quality public transportation system to meet the travel needs of its residents, to serve the local and regional economy, and to provide an environmentally friendly transportation choice. The City is pursuing a "transit first" policy that encourages the use of public transportation to accommodate increases in demand for transportation services before considering automobile alternatives. The emphasis is on expanding the transit system rather than roadway capacity.

By adopting a "transit first" approach, BTD is adding advocacy for transit to its traditional responsibilities that are primarily oriented to the maintenance and operation of city streets. The City is embracing a more comprehensive, multimodal view of transportation. Transportation concerns not only moving people and goods but is essential to improving quality of life and creating attractive urban environments. Transit use can reduce traffic and parking demands in congested downtown and neighborhood areas. Transit must be the mode of first choice for residents and commuters. Table 3 summarizes the transit goals that guide this approach.

BTD will play an important role to advance improvements to the transit system that support the City's "transit first" policy. This approach will include:

- **Advocacy for quality service** through BTD's role on the MBTA Advisory Board and as part of regular coordination efforts with the MBTA.
- Support for **federal funding** for new transit capital investments over the next ten years.
- Facilitation of **public-private partnerships** to create funding sources for new transit initiatives.
- Coordination with the BRA to encourage **transit-oriented development** that support high levels of transit use.
- **Technology** that can enhance customer service and transit operations.

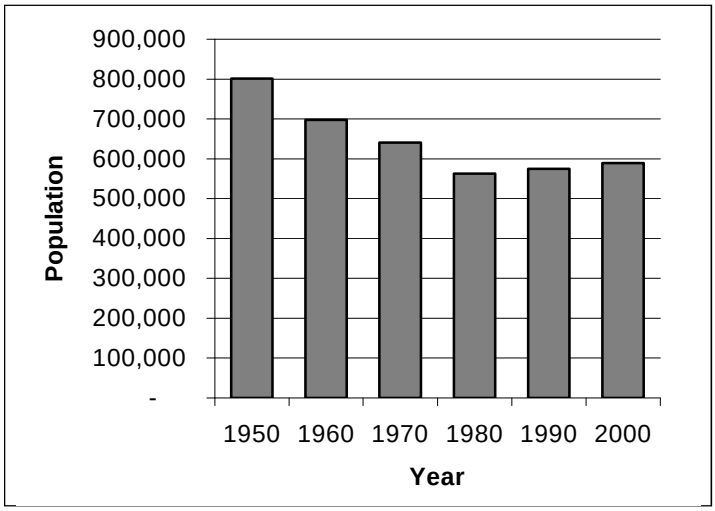
Table 3 – Transit Goals

GOALS
Service for Boston Residents and Neighborhood Livability
Improve service in areas not within convenient walk distance of rapid transit services[1].
Improve service for populations with low auto ownership levels.
Improve access to jobs for Boston residents.
Support transit use by encouraging transit-oriented development.
Economic Growth and Regional Connections
Provide regional transit access to existing and emerging economic centers.
Enhance transit connections to key regional destinations within the city.
Strengthen the network of regional intermodal centers within the city.

Note: 1. MBTA commuter rail, subway, light rail/trolley or bus rapid transit services.

The City of Boston has worked with developers to include transit improvements in their projects. This new station entrance/exit was built as part of the Prudential Center redevelopment.

Figure 8
Boston Population Changes: 1950 to 2000



Boston's population continued to increase in 2000.
(Source: U.S. Census)

Table 4 – Population Changes by Neighborhoods

NEIGHBORHOOD	1990	2000	PERCENT CHANGE
Allston-Brighton	70,284	69,648	-1%
Back Bay/Beacon Hill	27,808	26,721	-4%
Charlestown	14,718	15,195	3%
Dorchester (North)	25,068	28,775	15%
Dorchester (South)	60,630	63,430	5%
Downtown	15,982	17,516	10%
East Boston	32,941	38,413	17%
Fenway/Kenmore	32,880	35,602	8%
Hyde Park	29,985	31,709	6%
Jamaica Plain	40,995	38,196	-7%
Mattapan	36,135	37,486	4%
Roslindale	32,959	34,618	5%
Roxbury	58,893	56,658	-4%
South Boston	29,488	29,995	2%
South End	28,842	28,239	-2%
West Roxbury	29,706	28,753	-3%
Total	**567,314**	**580,954**	**2%**

Source: U.S. Census; Boston Redevelopment Authority.

Needs Assessment

The demand for public transit is affected by residential density, automobile ownership, and the location of employment centers. Population and employment create demand for services that change over time as residential neighborhoods are revitalized or development increases the number of jobs in a new section of the city. At the same time, the current system has limitations that constrain access for existing and potential new transit riders. Both issues, the new demand for services and the inability to serve existing demand due to systemic constrains, inform the need assessment discussion in the following pages. The needs assessment provides the basis for the development of future enhancements to the transit system.

Population Density

As illustrated in Figure 8, Boston's population increased by 2.6% between 1990 and 2000, building on the gains that have occurred since the low point of 1980. The greater population reflects a trend experienced around the country, as cities have once again become popular places to live. More people in the same amount of space means higher population density, which is positively correlated with public transit use.

Table 4 illustrates the change in population between 1990 and 2000 for Boston neighborhoods. East Boston, Dorchester (North), the downtown neighborhoods and Fenway/Kenmore had the largest increase in population between 1990 and 2000

In dense urban environments, there is a convergence of trip making between common origins and destinations that can be served well by a mass transportation system operating on fixed routes. Older cities like Boston grew up with transit, shaping the configuration of the transit system as the transit system in turn shaped the form of the land use patterns in the city. As a result, there has always been a relationship in Boston between the location of the transit system and the density of its residential neighborhoods. Figure 9 illustrates the city's population density.

- The highest densities occur in the downtown, Back Bay and South End neighborhoods. Walking and transit are popular commuting options in these neighborhoods.

- Other dense residential neighborhoods are located along the radial transit lines or are served by local bus service.

- The least dense neighborhoods of West Roxbury, Hyde Park and Roslindale are located outside the rapid transit system.

Small-scale future residential development in the city is anticipated to occur uniformly in all of Boston's neighborhoods. Many of these are infill residential projects. New high-density housing is planned or under construction in the downtown. The largest areas of potential residential development can be found in the South Boston Waterfront, Fenway, Roxbury and Dorchester, portions of which are not well served by rapid transit. Projects such as the Silver Line and the Urban Ring will improve transit service, but additional improvements will be needed to support the expanding population of the city.

Households without Cars

Boston residents use public transportation for many different trip purposes including work, shopping, and school. Some riders choose transit because it offers a cheaper, faster, or more convenient alternative to driving an automobile. However, there are many households in Boston without motor vehicles. Transit is an essential transportation mode for these households. As illustrated in Figure 10, the number of carless households varies by location, proximity to transit, and the type and density of residences.

- The highest concentrations of car-less households are found in downtown neighborhoods, the Fenway/Kenmore area, and sections of Roxbury and Dorchester.

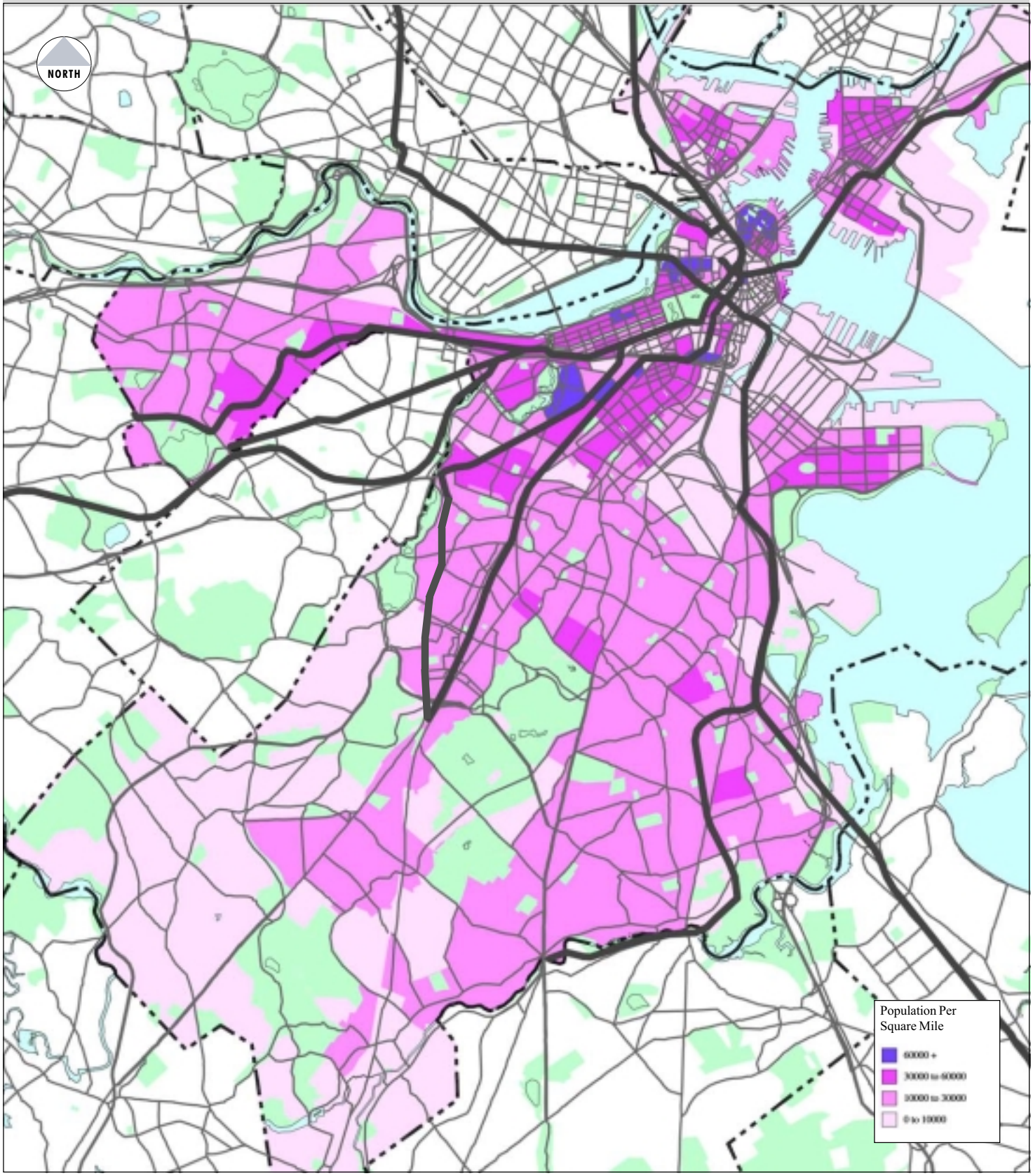
- Downtown neighborhoods have convenient rapid transit access or are within convenient walking distance of employment centers. Parking is difficult to find in these areas.

Fenway/Kenmore has access to Green Line service and limited parking availability. By contrast households without automobiles in Roxbury and Dorchester depend on bus service to meet their transit needs. As indicated in Table 5, low-density neighborhoods without rapid transit service like West Roxbury, Hyde Park and Roslindale have lower rates of households without autos. Most households in these neighborhoods have access to automobiles.

Table 5 – Boston Households without Autos

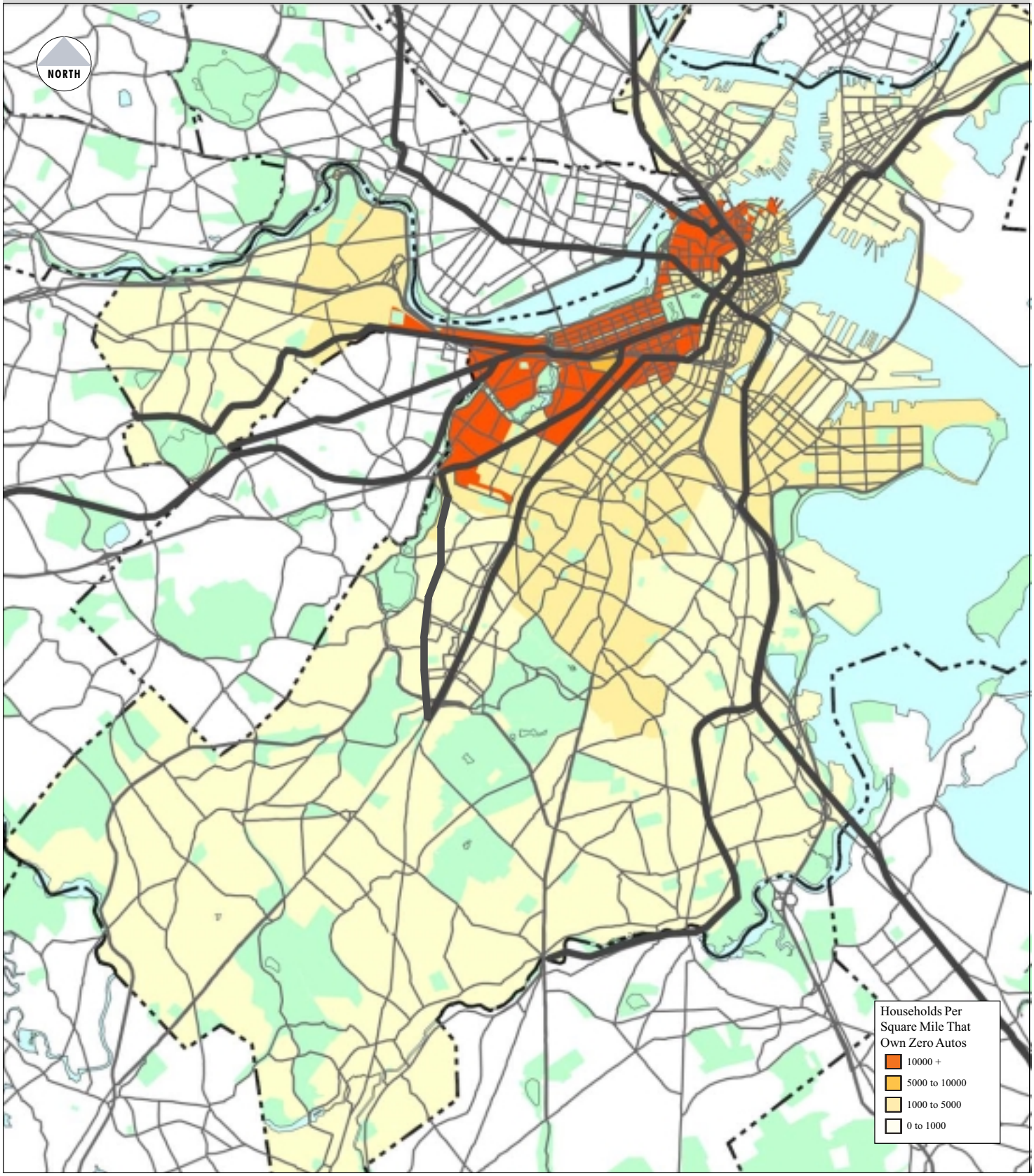
NEIGHBORHOOD	PERCENT
Fenway/Longwood Medical	73%
Chinatown/Theater District	59%
North End/West End	58%
Back Bay/Beacon Hill	57%
Downtown	57%
South End	51%
South Boston	43%
Roxbury	40%
East Boston	36%
Jamaica Plain/Mission Hill	33%
Allston/Brighton	32%
Charlestown	32%
Dorchester (South)	31%
Dorchester (North)	28%
Mattapan	21%
Hyde Park	20%
Roslindale	15%
West Roxbury	4%
Averages	
Boston	**38%**
Massachusetts	**14%**
National	**12%**

Source: 1990 Census.
Comparable 2000 Census data not available at time of analysis.



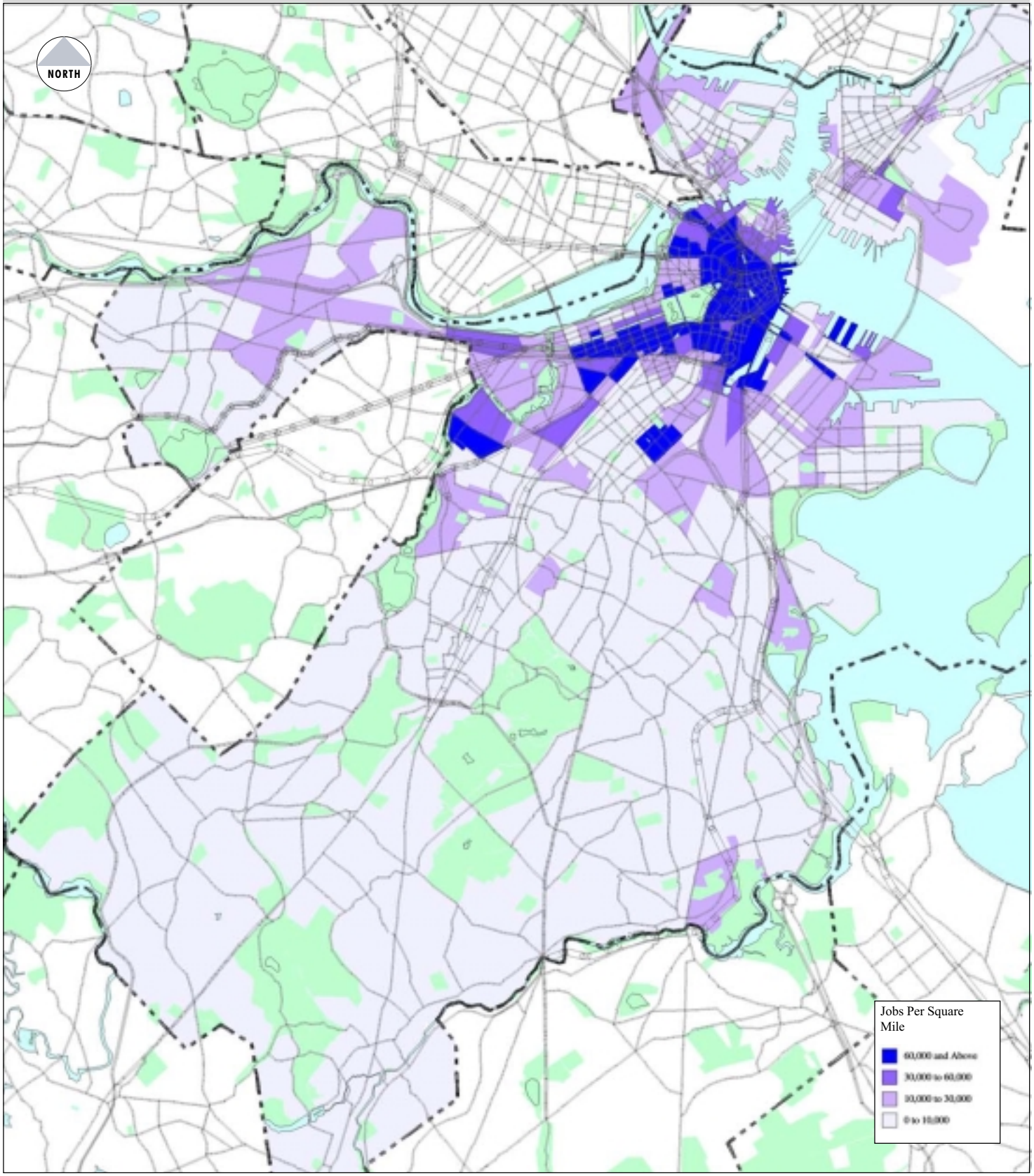
Source: CTPS

Figure 9:
Current Population Density



Source: CTPS

Figure 10:
Density of Households that Own Zero Autos



Source: CTPS

Figure 11:
Current Employment Density

Access to Employment Centers

As Figure 11 illustrates, most of the city's jobs are downtown or in the Back Bay. Fourteen of the thirty top employment centers in Boston are located in this section of Boston (see Table 6). Concentrated employment areas are essential to the success of a radial transit system such as Boston's.

The Red Line was extended to Alewife in 1985 and the Orange Line relocated to Forest Hills in 1987. This, the last major expansion of the MBTA rapid transit system came on line just as over 10 million square feet of new commercial space was added to the downtown and Back Bay in the mid-1980s to the early 1990s.

Job growth is likely to occur both in the downtown core of the city that is well served by transit and in areas less well served such as the Longwood Medical Area, the South Boston Waterfront, and the Albany Street corridor. These emerging job centers outside the downtown core have limited transit access. In response, employers in these districts have developed shuttle bus service to supplement and feed MBTA service.

- The Longwood Medical Area has shuttle bus connections to the Orange Line and Yawkey Station commuter rail station. Local and crosstown (CT) MBTA buses also provide connections.
- The BU Medical Area on Albany Street has private shuttle services to transit stations in addition to local and crosstown MBTA buses.
- The South Boston Waterfront relies on shuttle buses to downtown transit stations and water taxis.

Two projects in planning, the Silver Line and the Urban Ring, will improve transit access in these areas.

Boston's neighborhood business districts are once-again providing new employment. Most are located along the original street-car routes and were once centers of commercial activity. Dudley Square and the Washington Street corridor are re-emerging with new commercial and institutional development. Roslindale Square, the Center and South Streets corridor in Jamaica Plain, Codman Square, Bowdoin / Geneva, Uphams Corner and Grove Hall have all seen recent revitalization. These districts are generally served by MBTA bus service. New service will be key to their growth in the coming years.

Table 6 – Top 30 Employment Areas in Boston[1]

AREA WITHIN DOWNTOWN CORE	NUMBER OF JOBS
Financial District	74,600
Government Center	27,700
Downtown Crossing	19,600
Boylston/Newbury	19,400
Copley Square	18,100
Theater District	17,900
Mass General Hospital	16,200
Faneuil Hall/Waterfront	13,300
State House Offices	11,900
North Station/Bulfinch Triangle	11,300
South Station	9,900
Leather District	9,100
Prudential	9,100
North End	5,800
Total within Downtown Core	**263,900**
AREA OUTSIDE DOWNTOWN CORE	**NUMBER OF JOBS**
Longwood Medical Area (Fenway/LMA)	27,200
Logan Airport	16,400
East Fenway (Fenway/LMA)	11,100
Fort Point Channel (South Boston)	9,800
Boston Medical Center (South End)	9,500
BU/Kenmore Square (Fenway/LMA)	9,400
Lower Market Street (Allston/Brighton)	8,100
Dorchester Ave./Railyard (South Boston)	7,300
New Seaport Neighborhood (South Boston)	7,000
Broadway (South Boston)	6,600
Allston Landing (Allston/Brighton)	6,100
Harbor Point/Savin Hill (Dorchester)	6,050
Allston Village (Allston/Brighton)	5,500
St. Elizabeth's Area (Allston/Brighton)	5,400
South Huntington (Jamaica Plain /Mission Hill)	5,200
West Fenway (Fenway/LMA)	4,800
Total outside Downtown Core	**145,450**

Source: 1996 CTPS site-level employment database.
Note: 1. Represents approximately two-thirds of all jobs in Boston in 1996.

Figure 12:
Areas in Boston within Walking Distance of the Rapid Transit System

Walking Access to Rapid Transit Stations

Figure 12 illustrates, the rapid transit system provides access to large portions of Boston, including many residential areas and all of the major employment centers and attractions. Approximately 57% of Boston's population and 79% of its employment lies within a 10 minute walk to a rapid transit station. Table 7 lists transit mode share by neighborhood by trip destination. Neighborhoods along the radial transit system generally have high transit shares for trips to the downtown core, especially from neighborhoods with poor highway access. Neighborhoods in the downtown core such as Back Bay, Beacon Hill, and the North End rely on pedestrian access for many trips.

Large parts of the city are not within convenient walking distance of the rapid transit system, including sections of Dorchester, South Boston, Roxbury, Mattapan and Hyde Park. Residents, employees and visitors to these areas rely on local bus service to provide transit connections to their destinations or to transfer to the rapid transit system to continue their trip.

Of particular significance are those areas with no walking access to rapid transit, low automobile ownership, *and* an increase in population and commercial activity in the last decade. This is true for sections of Roxbury and Dorchester, including the area between Dudley Square and Grove Hall, the Blue Hill Avenue corridor, and the Four Corners, Bowdoin/Geneva and Codman Square districts. The population in these areas is primarily minority. Together they comprise a section of Boston most in need of new rapid transit service.

Hours of service are another important concern for transit users. The MBTA schedule meets most commuter, shopper and visitor trip demands. However, the transit schedule does not always meet the needs of night-shift workers. Transit service may not be frequent enough for some late-night jobs. These types of jobs are concentrated at Logan Airport, the US Postal Service (South Station), Gillette (South Boston), and the hospitals in the Longwood Medical Area and the Massachusetts General campus. The MBTA starts service on the CT3 route to Logan Airport at 4:00 a.m. to serve early-morning shifts.

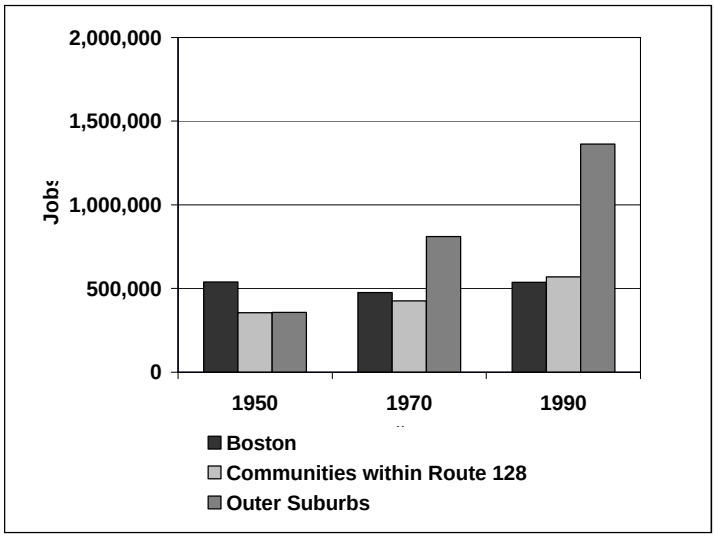
Table 7 – Transit Mode Share by Neighborhood

	TRIPS TO		
NEIGHBORHOOD	CORE[1]	OTHER	ALL
East Boston	71%	9%	13%
Roslindale	68%	10%	13%
Jamaica Plain/Mission Hill	63%	15%	19%
Allston/Brighton	62%	10%	13%
West Roxbury	62%	6%	7%
Hyde Park	61%	5%	7%
Mattapan	59%	10%	13%
Dorchester (South)	58%	8%	11%
Roxbury	57%	14%	17%
Dorchester (North)	54%	12%	15%
Charlestown	51%	14%	19%
Fenway/Longwood Medical Area	49%	19%	21%
South End	44%	17%	19%
South Boston	42%	12%	15%
Back Bay/Beacon Hill	8%	39%	23%
Chinatown/Theater District	7%	50%	32%
Downtown	5%	58%	35%
North End/West End	5%	38%	20%
Citywide Average			**19%**

Source: CTPS

Note: 1. Core includes Back Bay, Beacon Hill, Chinatown, Downtown, Theater District and North End, and West End.

Figure 13
Location of Jobs in Boston Metropolitan Area



The outer suburbs experienced tremendous growth in jobs between 1950 and 1990, while the number of jobs in Boston remained steady.

Access to Suburban Job Market

Another important trend is the growth of employment in suburban locations. As Figure 13 illustrates, these areas saw tremendous employment growth between 1950 and 1990. The MBTA system does not provide good access to jobs outside the city. The lack of convenient transit service to these areas limits access for Boston residents.

In the 1990s, employment continued to grow fastest in the communities outside Route 128, as indicated in the Metropolitan Area Planning Council's (MAPC) report, *A Decade of Change: Growth Trends in the Greater Boston Area – 1990 to 2000*. This trend was particularly evident in communities along Route I-495. Suburban communities in the MAPC region accounted for 58% of the net gain of 177,500 jobs between 1990 and 2000, while Boston and the other Inner Core communities accounted for 26% and 16% of the increase respectively. Franklin added over 8,600 jobs and other towns like Bellingham, Hopkinton, Middleton, North Reading, Norwell, and Southborough each saw an increase of 2,000 to 3,000 jobs.

Some of these towns have commuter rail service that provides connections to Boston and Inner Core job markets for suburban residents. There are limited opportunities for "reverse commuting" by transit that would bring Boston residents to these job markets. Suburban jobs tend to be located in office parks several miles from commuter rail stations.

Access to suburban jobs is particularly difficult for recipients of "Temporary Assistance for Needy Families" (TANF) that live in Boston. Many of these individuals live within close proximity to transit. However, employers with entry-level job opportunities are often not within close proximity to a transit station. A January 1998 study by US DOT, *Welfare Reform and Access to Jobs in Boston*, found that only one-third of employers in the Boston area with entry-level jobs were located within one-quarter mile of transit (a 5 minute walk). This presents a barrier for TANF recipients to enter the job market and leave public assistance.

Rapid Transit and Commuter Rail Constraints

Over the last thirty years, the MBTA has extended rapid transit and commuter rail service, relocated the Orange Line, and modernized older transit stations. These improvements have been motivated by the need to replace older facilities, to meet the requirements of the American with Disabilities Act and Central Artery mitigation, and to increase transit use in response to changing population and employment demands in the metropolitan area.

Today there are constraints on both the rapid transit and commuter rail lines that will need to be addressed by the MBTA. The result of these limitations is crowding on trains that reduces rider comfort and makes transit less desirable. The key constraints on the rapid transit system include:

- The signal equipment on the Orange and Green Lines is out of date. The age of equipment can affect the operating capacity of the system. Signal equipment on older Orange Line sections limits the overall capacity of the line. The MBTA plans to upgrade this portion of the line.

- Crowding at peak load points downtown limits the capacity of the system. Sometimes riders are forced to wait for two or more trains. Examples of peak load points include the Orange Line between North Station and Haymarket, the Red Line between South Station and Broadway, and the Blue Line between Maverick Square and Aquarium.

- Until recently, the capacity of the Green Line power system limited the ability of the MBTA to run three-car trains. Recent improvements now allow the MBTA to run three-car trains on portions of the line.

The popularity of commuter rail service has pushed the system toward its capacity. Standees are common on many South Shore trains. Three factors limit ridership growth:

- **Capacity at South Station** South Station has thirteen tracks that are all well-used by existing services. The physical constraints of the site limit potential expansion.

- **Rail capacity** including single track sections of the Old Colony service and sections with mixed commuter rail and freight operations.

- **Parking capacity** at regional stations outside of Boston, which is often filled between 7:00 and 8:00 a.m.

The MBTA will upgrade its signal equipment on the Orange Line to increase system capacity.

The MBTA has worked with private developers to develop innovative parking solutions such as the People Mover system at Wellington Station.

Existing platform capacity at South Station makes expansion of commuter rail service difficult.

Amtrak's Acela service will be expanded in the future.

Capacity Constraints at South Station

South Station has thirteen tracks to accommodate commuter rail and intercity service. Seven MBTA Commuter Rail lines terminate at South Station. These include:

- Worcester/Framingham Line
- Needham Line
- Franklin Line
- Attleboro/Providence/Stoughton Line
- Middleboro/Lakeville Line
- Kingston/Plymouth Line
- Fairmont Line

In addition, Amtrak operated the Acela high speed intercity train service from South Station. The Greenbush Line, in construction, will add additional riders, as will increasing service on the Fairmount Line, as proposed in Chapter 6 of this report. Ridership on the south side lines is forecast to increase 83% between 2000 and 2025. Additional rail service expansion that is proposed for New Bedford would also increase demand for tracks at South Station.

South Station capacity constraints make expansion of rail service difficult. Expansion of the number of platforms at South Station is limited by the location of Atlantic Avenue on the west and the US Postal Service General Mail Facility (GMF) on the east. The US Postal Service is considering a potential relocation of the GMF to a proposed site in an industrial section of South Boston west of the Reserved Channel. This relocation could add four new tracks to South Station.

The U.S. Postal Service has signed a memorandum of understanding with the Executive Office of Transportation and Construction to provide four new tracks after the Postal Service facility adjacent to the station is vacated. These new platforms could help to meet the projected higher demand from existing and proposed service to South Station.

Goals and Objectives

The goals and objectives outlined in Table 8 provide a reference framework for the transit improvements detailed in the next several chapters of this report. The objectives are derived from the needs-assessment explained earlier in this chapter. (See Roadway Goals and Objectives outlined in Table 18 on Page 80)

The City supports equity in the distribution of the benefits and costs that will result from improvements to the transit system. Boston is participating in an ongoing process managed by the Boston Region MPO Environmental Justice Committee to develop a more comprehensive understanding of the issues involved. Their draft definition of Environmental Justice is reproduced on the following page.

Table 8 – Transit Goals and Objectives

	GOALS	OBJECTIVES
Service for Boston Residents and Neighborhood Livability	Improve service in areas not within convenient walk distance of rapid transit services[1]	Improve rapid transit service to under-served areas of Dorchester, South Boston, Roxbury, Mattapan, Allston, and Hyde Park.
	Improve service for populations with low auto ownership levels.	Improve transit access to neighborhoods like Roxbury and Dorchester that have low-auto ownership levels. Support access needs of elderly, teens, and children.
	Improve access to jobs for Boston residents.	Provide convenient transit access between dense residential districts and existing and emerging economic centers in Boston. Create opportunities for "reverse" commuting between Boston neighborhoods and suburban employment centers.
	Support transit use by encouraging transit-oriented development.	Improve transit service to Boston "activity centers" with a potential to accommodate appropriate new development. Encourage further development of North and South Station districts.
Economic Growth and Regional Connections	Provide regional transit access to existing and emerging economic centers.	Improve transit connections to new growth areas in the South Boston Waterfront, Crosstown, and Dudley Square. Improve transit connections to existing economic centers outside the downtown (e.g., Longwood Medical Area). Relieve congestion on central subway system serving the downtown.
	Enhance transit connections to key regional destinations within the city.	Improve transit access to Boston's major tourism, cultural, entertainment and sports venues. Improve transit access to the regional network of intercity bus, rail and air travel services located in Boston.
	Strengthen the network of regional intermodal centers within the city	Enhance transit service at existing intermodal centers such as Back Bay, South Station and North Station. Identify and develop new locations for intermodal centers in Boston. Improve transit service to regional and Inner Harbor water transportation services.

Note: 1. MBTA commuter rail, subway, light rail/trolley or bus rapid transit services.

EQUITY IN BENEFITS AND COSTS

The City of Boston supports equity in the distribution of the benefits and cost associated with improvements to the transit system. BTD is participating in a regional discussion convened by the Boston Metropolitan Planning Organization (MPO) to develop a definition for environmental justice with regard to transportation. The text of that definition, as posted on the MPO's web site, is reprinted below.

The MPO is required to prepare a new Regional Transportation Plan every three years. BTD is also a member of the Environmental Justice Committee whose recommendations will be considered for the new plan. The committee is currently working on finalizing a Work Scope that will be the basis for its activities in 2002-03. The objectives include assessing the relative mobility of low-income and minority communities under existing and future conditions and developing remedies for identified inequities.

Definition

The following definition of environmental justice has been adopted by the Boston Region MPO:

Environmental justice requires the MPO to

- Examine the allocation of benefits and burdens, currently and in the planned future,
- Ensure that minority and low-income communities are treated equitably in the provision of transportation services and projects, and
- Provide full participation for minority and low-income communities to advise the MPO during its planning and decision-making process.

The examination of environmental justice will include consideration of patterns of capital investment and allocation that have contributed to present conditions and inform current and future MPO decisions.

Measures

Regarding the measurement of environmental justice, the Ad Hoc Committee has been primarily interested in transit issues. As articulated by its members, many people who live in low-income and minority neighborhoods are transit-dependent, and improvements in transit are of paramount concern. The discussion about roadways was more centered on perceived burdens.

The Boston Region MPO will use the following performance measures to address transit services:

- Vehicle load
- Frequency of service
- Schedule adherence
- Transit amenities (including shelter availability)
- Vehicle assignment (age, air conditioning, emissions profile)

Each of these measures will be used to compare the relative level of service in communities regardless of transit mode.

In addition to these performance measures, the MPO developed a measure of transit mobility. The MPO, assisted by the Environmental Justice Ad Hoc Committee, selected 18 origin points and 14 destination points. The origin zones include low-income and minority areas and non-low-income and non-minority areas, while the destination zones were selected to include high-employment areas (with large numbers of service jobs), hospitals, and schools. Using the regional model, the MPO examined travel times, travel distances, and travel speeds between each of these points and each of these destinations.